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523-01

PATENT
Attorney Docket No. FJN-063

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Nakagawa et al.
SERIAL NO.: 09/051,670 GROUP NO.: 1647
FILING DATE: April 16, 1998 EXAMINER: Romeo, D.
TITLE: Novel DNA and Process for Preparing Protein Using DNA

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the patents and publications are enclosed.

05/02/2001 KNOXHAM1 00000031 09051670

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180.00 DP

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☐ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☒ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☒ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or
- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**

- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

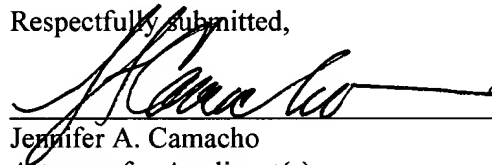
It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]:

- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

Respectfully submitted,



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FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT	ATTORNEY DOCKET NO.: FJN-063 APPLICANT(S): Nakagawa et al. SERIAL NO.: 09/051,670 FILING DATE: April 16, 1998 GROUP: 1647
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U.S. PATENT DOCUMENTS

EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A3	5,118,667	6/2/92		514	12
	A4	5,393,739	2/28/95		514	12
	A5	5,578,569	11/26/96		514	12
	A6	5,599,708	2/4/97		435	240.27
	A7	5,658,756	8/19/97		435	69.1
	A8	5,843,678	12/1/98		435	7.1
	A9	5,985,832	11/16/99		514	12
	A10	6,017,729	1/25/00		435	69.1

FOREIGN PATENT DOCUMENTS

EXAM. INIT.	DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B4	0 514 130 A2	EP	A61K 37	02	05/12/92		Y
	B5	0 727 211 A1	EP	A61K 31	50	2/7/96		Y
	B6	96/28546	WO	C12N 15	00	3/15/95		Y
	B7	97/00317	WO	C12N 15	11	6/4/96		Y
	B8	97/00318	WO	C12N 15	11	6/7/95		Y



OTHER ART, JOURNAL ARTICLES, ETC.		
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C9	Anderson et al., "A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function", <u>Nature</u> , Vol. 390, November 13, 1997, pp. 175-179.
	C10	Chambers et al., "Generation of osteoclast-inductive and osteoclastogenic cell lines from the H-2btsA58 transgenic mouse," <u>Proceed. of the National Acad. of Sciences of USA</u> , vol. 90, June 1993, pgs. 5578-5582.
	C11	Chenu et al., "Transforming growth factor β inhibits formation of osteoclast-like cells in long-term human marrow cells," <u>Proceed. of the National Acad. of Sciences of USA</u> , vol. 85, August 1998, pgs. 5683-5687.
	C12	Fawthrop, F.W. et al., "The Effect of Transforming Growth Factor β on the Plasminogen Activator Activity of Normal Human Osteoblast-like Cells and a Human Osteosarcoma Cell Line MG-63" <u>J. Bone and Mineral Res.</u> 7(12):1363-1371 (1992)
	C13	Fenton, A. J. et al., "Long-Term Culture of Disaggregated Rat Osteoclasts: Inhibition of Bone Resorption and Reduction of Osteoclast-Like Cell Number by Calcitonin and PTHrP[107-139]" <u>J. Cellular Phys.</u> 155:1-7 (1993)
	C14	George et al., <u>Macromolecular Sequencing and Synthesis</u> , New York, 1998, pg. 127-149.
	C15	Goodwin et al., "Molecular cloning and expression of the type 1 and type 2 receptors for tumor necrosis factor," <u>Database EMROD, EMBL Databases</u> , Accession Number: M59378, June 28, 1991.
	C16	Gowen et al., "Preferential Inhibition of Cytokine-Stimulated Bone Resorption by Recombinant Interferon Gamma," <u>Journal of Bone and Mineral Research</u> , vol. 1, number 5, 1986, pgs. 469-474.
	C17	Hattersley et al., "Human Macrophage Colony-Stimulating Factor Inhibits Bone Resorption by Osteoclasts Disaggregated From Rat Bone," <u>Journal of Cellular Physiology</u> , vol. 137, number 1, October 1998, pgs. 199-203.
	C18	International Search Report for PCT/JP98/01728
	C19	Kaji et al., "Insulin-like growth factor-I mediates osteoclast-like cell formation stimulated by parathyroid hormone", <u>Journal of Cellular Physiology</u> , Vol. 172, No. 1, July 10, 1997, pp. 55-62.
	C20	Kasono et al., "Inhibitory effect of interleukin-4 on osteoclast-like cell formation in mouse bone marrow culture," <u>Bone and Mineral</u> , vol. 21, 1993, pgs. 179-188.
	C21	Rieger et al., <u>Glossary of Genetics and Cytogenetics</u> , Springer-Verlag, Berlin Heidelberg New York, 1976, pg. 17.
	C22	Simonet et al., "Osteoprotegerin: a novel secreted protein involved in the regulation of bone density," <u>CELL</u> , vol. 89, April 18, 1997, pgs. 309-319.
	C23	Takada et al., "A simple method to assess osteoclast-mediated bone resorption using unfractionated bone cells," <u>Bone and Mineral</u> , vol. 17, 1992, pgs. 347-359.
	C24	Watanabe et al., "Interleukin-4 as a Potent Inhibitor of Bone Resorption," <u>Biochem. and Biophys. Research Comm.</u> , vol. 172, number 3, 1990, November 1990, pgs. 1035-1041.
	C25	Wong et al., "TRANCE is a novel ligand of the tumor necrosis factor receptor family that activates c-Jun N-terminal kinase in T cell", <u>J.Biol. Chem.</u> , Vol. 272, No. 40, October 28, 1997, pp. 24727-25408.
EXAMINER		DATE CONSIDERED